

IN THE CLAIMS

Please cancel Claim 22, without prejudice or disclaimer of subject matter.

Please amend Claims 11-21, and add new Claims 24-35, to read as follows. (Of the amended claims, Claims 12, 14-16 and 18-21 have been withdrawn as being directed to a non-elected species.)

1-10. (Canceled)

11. (Currently Amended) An ink jet recording head comprising:

a recording element substrate provided with a discharge port group for discharging ink;

an electric wiring substrate electrically connected with said recording element substrate;

a supporting member for ~~supporting~~ holding and fixing said recording element substrate and said electric wiring substrate;

a sealing area ~~positioned on~~ requiring sealing, formed by said supporting member, ~~adjacent to~~ said recording element substrate and said electric wiring substrate; and

a ~~sealant~~ filler retaining portion comprising a stepping portion of said recording element substrate and said supporting member, said filler retaining portion being disposed adjacent to a side face of said recording element substrate having no electrode terminals arranged therefor, and said filler retaining portion communicating with said sealing area,

wherein at least said sealing area is filled with a thermohardening filler, the thermohardening filler being hardened after being filled.

12. (Withdrawn) An ink jet recording head according to Claim 11, wherein said ~~sealant~~ filler retaining portion is an opening portion arranged on a reverse ~~side of a~~ surface of said supporting member ~~for supporting said recording element substrate and communicating with an area adjacent to a side face of said recording element substrate.~~

13. (Currently Amended) An ink jet recording head according to Claim 11, wherein sealing resin is filled from said ~~sealant~~ filler retaining portion onto a circumference of said recording element substrate.

14. (Withdrawn) An ink jet recording head according to Claim 11, wherein said ~~sealant~~ filler retaining portion is arranged toward a vicinity of a center of a reverse side of a portion electrically connecting said recording element substrate and said wiring substrate.

15. (Withdrawn) An ink jet recording head according to Claim 11, wherein said ~~sealant~~ filler retaining portion is tapered thinner toward said recording element substrate.

16. (Withdrawn) An ink jet recording head according to Claim 11, wherein said ~~sealant~~ filler retaining portion comprises portions arranged to be positioned on a sealing

location on one side of said recording element substrate and on a sealing location on an opposite side of said recording element substrate.

17. (Currently Amended) An ink jet recording head according to Claim 11, ~~wherein said supporting member comprises~~ further comprising a supporting plate provided with an opening portion for said recording element substrate to be in contact with said supporting member, being inclusively placed between said wiring substrate and said supporting member to hold and fix said wiring substrate, and a supporting substrate for holding and fixing said recording element substrate by being inclusively placed between said recording element substrate and said supporting member.

18. (Withdrawn) An ink jet recording head according to Claim 17, wherein said supporting substrate is provided with a communicating hole communicating said ~~sealant~~ filler retaining portion arranged on a reverse side of said supporting member with a portion between said recording element substrate and said supporting plate.

19. (Withdrawn) An ink jet recording head according to Claim 15, wherein a diameter of a hole of said ~~sealant~~ filler retaining portion tapered thinner toward a leading end thereof is substantially equal to a diameter of a communicating hole of a supporting substrate.

20. (Withdrawn) An ink jet recording head according to Claim 17, wherein a plurality of communicating holes are arranged to communicate with said ~~sealant~~ filler retaining portion.

21. (Withdrawn) An ink jet recording head according to Claim 17, wherein a communicating hole arranged for said supporting substrate is itself to become a ~~sealant~~ filler retaining portion.

22. (Canceled)

23. (Original) An ink jet recording apparatus provided with a carriage having an ink jet recording head according to Claim 11 mounted thereon.

24. (New) An ink jet recording head comprising:
a recording element substrate provided with a discharge port group for discharging ink;
an electric wiring substrate electrically connected with said recording element substrate;
a supporting member for holding and fixing said recording element substrate and said electric wiring substrate;
a sealing area formed by said supporting member, said recording element substrate and said electric wiring substrate; and

a filler retaining portion comprising a stepping portion of said recording element substrate and said supporting member, said filler retaining portion being disposed adjacent to a side face of said recording element substrate having no electrode terminals arranged therefor, and said filler retaining portion communicating with said sealing area,

wherein said ink jet recording head is made by a process comprising the following steps:

injecting thermohardening filler into said filler retaining portion;

filling the sealing area with the thermohardening filler injected into said filler retaining portion by heating the filler to flow; and

hardening the filled thermohardening filler.

25. (New) An ink jet recording head according to Claim 24, wherein said filler retaining portion is an opening portion arranged on a reverse surface of said supporting member.

26. (New) An ink jet recording head according to Claim 24, wherein sealing resin is filled from said filler retaining portion onto a circumference of said recording element substrate.

27. (New) An ink jet recording head according to Claim 24, wherein said filler retaining portion is arranged toward a vicinity of a center of a reverse side of a portion electrically connecting said recording element substrate and said wiring substrate.

28. (New) An ink jet recording head according to Claim 24, wherein said filler retaining portion is tapered thinner toward said recording element substrate.

29. (New) An ink jet recording head according to Claim 24, wherein said filler retaining portion comprises portions arranged to be positioned on a sealing location on one side of said recording element substrate and on a sealing location on an opposite side of said recording element substrate.

30. (New) An ink jet recording head according to Claim 24, further comprising a supporting plate provided with an opening portion for said recording element substrate to be in contact with said supporting member, being inclusively placed between said wiring substrate and said supporting member to hold and fix said wiring substrate, and a supporting substrate for holding and fixing said recording element substrate by being inclusively placed between said recording element substrate and said supporting member.

31. (New) An ink jet recording head according to Claim 30, wherein said supporting substrate is provided with a communicating hole communicating said filler retaining portion arranged on a reverse side of said supporting member with a portion between said recording element substrate and said supporting plate.

32. (New) An ink jet recording head according to Claim 28, wherein a diameter of a hole of said filler retaining portion tapered thinner toward a leading end thereof is substantially equal to a diameter of a communicating hole of a supporting substrate.

33. (New) An ink jet recording head according to Claim 30, wherein a plurality of communicating holes are arranged to communicate with said filler retaining portion.

34. (New) An ink jet recording head according to Claim 30, wherein a communicating hole arranged for said supporting substrate is itself to become a filler retaining portion.

35. (New) An ink jet recording apparatus provided with a carriage having an ink jet recording head according to Claim 24 mounted thereon.